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EXAMINER	
BRANDT, CHRISTOPHER M	
ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/500,591	SAKODA, KAZUYUKI	
	Examiner	Art Unit	
	CHRISTOPHER M. BRANDT	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 September 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36,38,52-87,103 and 154* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36,38,52-87,103 and 154* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 December 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/5/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement submitted on August 5, 2009 has been considered by the examiner and placed of record in the application file.

Response to Amendment

This Action is in response to applicant's amendment/arguments filed on September 4, 2009. **1-36, 52-87, 103-138, and 154** are still currently pending in the present application.

Response to Arguments

Applicant's arguments with respect to claims 1-36, 52-87, 103-138, and 154 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4, 6-14, 16, 18-21, 24-26, 28-32, 34-36, 52-55, 57-65, 67, 69-72, 75-77, 79-83, 85-87, 103-106, 108-116, 118, 120-123, 126-128, 130-134, 136-38, and 154 are rejected under 35 USC 102(e) as being unpatentable over **Benveniste (US PGPUB 2003/0174690 A1)** in view of **Nyman et al. (US PGPUB 2003/0037033 A1, hereinafter Nyman)** in view of **Kennedy (US PGPUB 2004/0057409 A1)** and further in view of **Liu (US Patent 6,980,537 B1)**.

Consider **claim 52 (and as applied to claims 1, 103, and 154)**. Benveniste discloses a wireless communication apparatus operating decentralized distributed type communication environment constructed such that respective communication stations transmit beacons indicative of information concerning a network with each other at a predetermined time space (paragraph 80) comprising:

communication means for transmitting and receiving wireless data (paragraph 20, read as mobile station communicating with other stations);

beacon signal generating means for generating a beacon signal indicative of information concerning the local station (paragraph 19, 73, read as the mobile station that starts the wireless LAN cell will begin by resetting its TSF timer to zero and transmitting a beacon packet, choosing a beacon period);

beacon signal analyzing means for analyzing a beacon signal received from a neighboring station by said communicating means (paragraph 73, read as each station receiving the timing packet updates its SF clock if the received timestamp is later than the current value of the clock; and

timing control means for controlling a beacon transmission timing at which said communication means transmits beacons (paragraph 73, read as all stations in an IBSS cell prepare to transmit a beacon frame packet at a target beacon transmission time (TBTT). Each station prepares its beacon packet to contain the superframe timestamp value. Each station selects a random delay when it is to transmit its superframe timestamp value).

Benveniste substantially discloses the claimed invention but fails to teach a decentralized distributed communication environment without an access point serving as a master control station as part of an ad hoc network.

However, Nyman teaches a decentralized distributed communication environment without an access point serving as a master control station as part of an ad hoc network (paragraph 188, read as in an IEEE 802.11 ad hoc network, there is no access point (AP) to act as the central time source for the ad hoc network).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Nyman into the invention of Benveniste in order to be able to efficiently and quickly construct a network without much planning (paragraph 5).

In addition, Benveniste and Nyman fail to explicitly teach the information concerning a network including indications of beacons received from other communication stations that are part of the network.

However, Kennedy teaches the information concerning a network including indications of beacons received from other communication stations that are part of the network (paragraphs

30, 31, read as receiving the beacon signals and storing node condition information at each node, where the beacon signals include information relating to a condition of the corresponding mobile node or group of nodes or a condition, of the mobile ad hoc network such as status of the links between the nodes of the network).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Kennedy into the invention of Benveniste and Nyman in order to efficiently manage and control routes in an ad hoc network (paragraph 10).

Moreover, Benveniste, Nyman, and Kennedy fail to teach that each beacon including neighboring beacon information pertaining to beacon transmission times of neighboring communication stations.

However, Liu teaches that each beacon including neighboring beacon information pertaining to beacon transmission times of neighboring communication stations (column 8 lines 28-59, read as beacon or node status packet, where this packet includes a neighboring status packet that relates to status packet transmission times).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Liu into the invention of Benveniste, Nyman, and Kennedy in order to significantly reduce overhead traffic.

Consider **claim 53 and as applied to claim 52 (and similarly applied to claims 2 and 104)**. Benveniste discloses wherein said information concerning the network written in the

beacon generated from said beacon signal generating means is information indicating whether or not the local station is aware of a time at which a beacon signal is transmitted (paragraph 73).

Consider **claim 54 and as applied to claim 52 (and similarly applied to claims 3 and 105)**. Benveniste discloses wherein said timing control means transmits a beacon signal at a predetermined time space when a communication station joins a network (paragraphs 18, 22).

Consider **claim 55 and as applied to claim 54 (and similarly applied to claims 4 and 106)**. Benveniste discloses wherein said communication means performs reception continuously over a time period longer than its own beacon transmission interval at least once at a predetermined time (paragraphs 38, 73).

Consider **claim 57 and as applied to claim 53 (and similarly applied to claims 6 and 108)**. Benveniste discloses wherein said information indicating whether or not the local station is aware of a time at which a beacon signal is transmitted is information indicated by a relative time between said time and a time at which the local station transmits a beacon signal (paragraphs 19, 53).

Consider **claim 58 and as applied to claim 53 (and similarly applied to claims 7 and 109)**. Benveniste discloses disclose wherein each of said timing control means determines a beacon transmission time based on information obtained from a beacon signal, analyzed by said beacon signal analyzing means, from other station (paragraph 73).

Consider **claim 59 and as applied to claim 58 (and similarly applied to claims 8 and 110** Benveniste discloses wherein said timing control means continues to receive a beacon from said communication means over a predetermined time period before starting transmitting a new

beacon, it holds reception time information of a received beacon transmitted from other station as first information and it shifts information described in said received beacon indicating whether or not the local station is aware of a time at which a beacon signal is transmitted based upon said information and it holds the shifted information as second information (paragraphs 19, 53, 73).

Consider **claim 60 and as applied to claim 59 (and similarly applied to claims 9 and 111)**. Benveniste discloses wherein said communication station extracts a reception time of a beacon, which the local station or the local station and other station can receive, from said second information, it determines an interval in which a beacon reception time space becomes a maximum beacon space as a target interval and it sets a beacon transmission time of the local station to a central time of said target interval (paragraphs 73, 78).

Consider **claim 61 and as applied to claim 60 (and similarly applied to claims 10 and 112)**. Benveniste discloses wherein said timing control means attempts to receive a signal transmitted from other station by said communication means during a predetermined time period and it holds a time zone with a small frequency at which a beacon and other signal are received as third information (paragraph 74).

Consider **claim 62 and as applied to claim 61 (and similarly applied to claims 11 and 113)**. Benveniste discloses wherein said timing control means extracts each beacon space information, it determines an interval corresponding to a time zone with a small frequency at which a signal obtained from said third information as a target interval and it sets a beacon transmission time of the local station to a central time of said target interval (paragraphs 73, 74).

Consider **claim 63 and as applied to claim 58 (and similarly applied to claims 12 and 114)**. Benveniste discloses wherein said timing control means determines a new beacon transmission time if said beacon signal analyzing means judges a beacon transmission time alteration request message from other station (paragraph 21).

Consider **claim 64 and as applied to claim 52 (and similarly applied to claims 13 and 115)**. Benveniste discloses wherein said information concerning the network described in a beacon generated from said beacon signal generating means is information indicating whether or not the local station is aware of a time at which a received beacon signal is transmitted (paragraphs 19, 53, 73).

Consider **claim 65 and as applied to claim 64 (and similarly applied to claims 14 and 116)**. Benveniste discloses wherein said information indicative of whether or not the local station is aware of a time at which a received beacon signal is transmitted is information indicated by a relative time between said time and a transmission time of a beacon signal from the local station (paragraph 73).

Consider **claim 67 and as applied to claim 52 (and similarly applied to claims 16 and 118)**. Benveniste discloses wherein said timing control means delays said transmission time of a beacon signal transmitted from a communication station within said network from a predetermined target beacon transmission time by a random time and said beacon signal generating means describes information indicative of a delayed amount in said beacon (paragraphs 19, 67, 73, 76).

Consider **claim 69 and as applied to claim 67 (and similarly applied to claims 18 and 120)**. Benveniste discloses wherein when said communication means receives a beacon from other communication station, said timing control means calculates a target beacon transmission time from a beacon reception time in consideration of a time indicative of said delay amount (paragraphs 19, 67, 73, 76, read as target beacon transmission time (TBTT)).

Consider **claim 70 and as applied to claim 69 (and similarly applied to claims 19 and 121)**. Benveniste discloses wherein said communication station adjusts a clock of the local station in accordance with a timing of other station when a neighboring station target beacon transmission time predicted from the clock value memorized in the local station and a target beacon transmission time of a beacon transmission station which results from subtracting a time at which a beacon was received in actual practice and an intentionally delayed beacon transmission time described in a beacon are different from each other (paragraphs 19, 67, 73, 76, read as target beacon transmission time (TBTT)).

Consider **claim 71 and as applied to claim 70 (and similarly applied to claims 20 and 122)**. Benveniste discloses wherein said communication station adjusts a clock of the local station in accordance with a timing of other station when the target beacon transmission time of the beacon transmission station is delayed from the target beacon transmission time predicted by the local station (paragraph 73).

Consider **claim 72 and as applied to claim 67 (and similarly applied to claims 21 and 123)**. Benveniste discloses disclose wherein said beacon signal generating means describes a delay amount of a beacon transmission time in said beacon if said beacon transmission time is

delayed due to an external primary factor when it transmits a beacon under control of said timing control means (paragraphs 19, 22, 26, 73).

Consider **claim 75 and as applied to claim 52 (and similarly applied to claims 24 and 126)**. Benveniste discloses wherein said timing control means sets a predetermined time period in which a beacon transmission station can transmit a packet with a priority after said communication means has transmitted said beacon signal (paragraphs 24-26, 28, 38).

Consider **claim 76 and as applied to claim 75 (and similarly applied to claims 25 and 127)**. Benveniste discloses wherein said communication station sets a time period in which each communication station performs transmission based upon predetermined contention control after said predetermined time period in which said beacon transmission station can transmit a packet with a priority has expired (paragraphs 24-26, 28, 38).

Consider **claim 77 and as applied to claim 76 (and similarly applied to claims 26 and 128)**. Benveniste discloses wherein said communication station which communicates with said beacon transmission station can transmit a packet with a priority at said predetermined time period in which said beacon transmission station can transmit a packet with a priority (paragraphs 24-26).

Consider **claim 79 and as applied to claim 75 (and similarly applied to claims 28 and 130)**. Benveniste discloses wherein said timing control means recognizes the state in which it does not receive a signal from other station over a predetermined period calculated by a predetermined procedure before the local station transmits a packet and it sets said

predetermined period to be short during a predetermined time period in which it can transmit a packet with a priority (paragraphs 24-26, 73).

Consider **claim 80 and as applied to claim 79 (and similarly applied to claims 29 and 131)**. Benveniste discloses wherein said timing control means recognizes the state in which it does not receive a signal from other station over a predetermined period calculated by a predetermined procedure before the local station transmits a packet and it sets said predetermined period to be long only during said predetermined time period immediately after it received a beacon from other station (paragraphs 19, 53, 73).

Consider **claim 81 and as applied to claim 79 (and similarly applied to claims 30 and 132)**. Benveniste discloses wherein each of said communication stations transmits a transmission request signal and recognizes reception of a response to said transmission request signal before said communication means transmits a signal (paragraph 73).

Consider **claim 82 and as applied to claim 81 (and similarly applied to claims 31 and 133)**. Benveniste discloses wherein each of said communication stations does not carry out virtual carrier sense when it received the transmission request signal correctly and it carries out virtual carrier sense when it received the response to said transmission request signal correctly (paragraphs 29, 35).

Consider **claim 83 and as applied to claim 79 (and similarly applied to claims 32 and 134)**. Benveniste discloses wherein it is determined by said communication station whether or not a media is clear over a time period corresponding to a stipulated maximum signal length

before transmission when it attempts to transmit a beacon signal immediately after it is changed from the sleep state to the active state (paragraphs 42, 73, 80).

Consider **claim 85 and as applied to claim 75 (and similarly applied to claims 34 and 136)**. Benveniste discloses wherein said timing control means, which received a stream traffic transmission request, extracts a plurality of intervals in which a beacon is not transmitted and it transmits a beacon or a signal similar to the beacon in said plurality of extracted intervals (paragraphs 39, 73, 74).

Consider **claim 86 and as applied to claim 85 (and similarly applied to claims 35 and 137)**. Benveniste discloses wherein said communication station transmits said signal similar to said beacon continuously or intermittently (paragraphs 39, 73).

Consider **claim 87 and as applied to claim 85 (and similarly applied to claims 36 and 138)**. Benveniste discloses wherein each of said communication stations recognizes the state in which it does not receive a signal from other station over a predetermined period calculated by a predetermined procedure before the local station transmits a packet and it sets said predetermined period to be short during a predetermined time period in which it can transmit a packet with a priority (paragraphs 24-26, 28, 38, 73, 74).

Claims 5, 15, 17, 22, 23, 27, 56, 66, 68, 73, 74, 78, 107, 117, 119, 124, 125, 129 are rejected under 35 USC 103(a) as being unpatentable over **Benveniste (US PGPUB 2003/0174690 A1)** in view of **Nyman et al. (US PGPUB 2003/0037033 A1, hereinafter Nyman)** in view of **Kennedy (US PGPUB 2004/0057409 A1)** in view of **Liu (US Patent**

6,980,537 B1) and further in view of **Khun-Jush et al. (US PGPUB 2005/0054294 A1, hereinafter Khun-Jush)**.

Consider **claim 56 and as applied to claim 53 (and similarly applied to claims 5 and 107)**. Benveniste discloses wherein said beacon signal generating means, which became aware of approach of a time at which other station plans to transmit a beacon with reference to a clock value memorized in the local station (paragraph 73).

Benveniste, Nyman, Kennedy, and Liu fail to explicitly teach transmitting information for prohibiting a neighboring station from transmitting data over a predetermined period and it energizes said communication means to transmit said beacon.

However, Khun-Jush teaches transmitting information for prohibiting a neighboring station from transmitting data over a predetermined period and it energizes said communication means to transmit said beacon (paragraphs 8, 23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Khun-Jush into the invention of Benveniste, Nyman, Kennedy, and Liu in order to detect foreign transmissions (paragraph 21, read as transmitting a message to other nodes in the system, which message is a message pre-defined within the system as a message prohibiting all nodes from transmitting during a certain interval).

Consider **claim 66 and as applied to claim 64 (and similarly applied to claims 15 and 117**. Benveniste, Nyman, Kennedy, and Liu disclose the claimed invention but fails to explicitly teach wherein said specific time zone in which said beacon signal is transmitted is set to a

transmission prohibit interval by information described in the beacon generated from said beacon signal generating means.

However, Khun-Jush teaches wherein said specific time zone in which said beacon signal is transmitted is set to a transmission prohibit interval by information described in the beacon generated from said beacon signal generating means (paragraphs 8, 23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Khun-Jush into the invention of Benveniste, Nyman, Kennedy, and Liu in order to detect foreign transmissions (paragraph 21, read as transmitting a message to other nodes in the system, which message is a message pre-defined within the system as a message prohibiting all nodes from transmitting during a certain interval).

Consider **claim 68 and as applied to claim 67 (and similarly applied to claims 17 and 119)**. Benveniste discloses wherein said beacon signal generating means, which became aware of approach of a time at which other station plans to transmit a beacon with reference to a clock value memorized in the local station (paragraph 73).

Benveniste, Nyman, Kennedy, and Liu fail to explicitly teach adding information for prohibiting a neighboring station from transmitting data over a predetermined period to a beacon and it energizes said communication means to transmit said resultant information.

However, Khun-Jush teaches adding information for prohibiting a neighboring station from transmitting data over a predetermined period to a beacon and it energizes said communication means to transmit said resultant information (paragraphs 8, 23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Khun-Jush into the invention of Benveniste, Nyman, Kennedy, and Liu in order to detect foreign transmissions (paragraph 21, read as transmitting a message to other nodes in the system, which message is a message pre-defined within the system as a message prohibiting all nodes from transmitting during a certain interval).

Consider **claim 73 and as applied to claim 67 (and similarly applied to claims 22 and 124)**. Benveniste, Nyman, Kennedy, and Liu disclose the claimed invention but fail to explicitly teach wherein said random time with which the beacon transmission time is delayed from the target beacon transmission time is given in the form of a pseudorandom sequence and the state of said pseudorandom sequence is transmitted as information indicative of a delay amount described in said beacon.

However, Khun-Jush teaches wherein said random time with which the beacon transmission time is delayed from the target beacon transmission time is given in the form of a pseudorandom sequence and the state of said pseudorandom sequence is transmitted as information indicative of a delay amount described in said beacon (paragraphs 53, 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Khun-Jush into the invention of Benveniste, Nyman, Kennedy, and Liu in order to prevent multiple quiet time indications in an beacon causing unnecessary overhead (paragraph 53).

Consider **claim 74 and as applied to claim 73 (and similarly applied to claims 23 and 125)**. Benveniste and Khun-Jush disclose wherein said timing control means holds the state of said pseudorandom sequence described in said beacon and it calculates the next beacon transmission time of said beacon transmission station by updating a pseudorandom sequence value of every predetermined period (Khun-Jush; paragraphs 53, 54).

Consider **claim 78 and as applied to claim 75 (and similarly applied to claims 27 and 129)**. Benveniste discloses wherein said communication station, which became aware of approach of a time at which other station plans to transmit a beacon with reference to a clock value memorized in the local station (paragraph 73).

Benveniste, Nyman, Kennedy, and Liu fail to teach transmitting information for prohibiting a neighboring station from transmitting data over a predetermined period.

However, Khun-Jush teaches transmitting information for prohibiting a neighboring station from transmitting data over a predetermined period (paragraphs 8, 23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Khun-Jush into the invention of Benveniste, Nyman, Kennedy, and Liu in order to detect foreign transmissions (paragraph 21, read as transmitting a message to other nodes in the system, which message is a message pre-defined within the system as a message prohibiting all nodes from transmitting during a certain interval).

Claims 33, 84, and 135 are rejected under 35 USC 103(a) as being unpatentable over **Benveniste (US PGPUB 2003/0174690 A1)** in view of **Nyman et al. (US PGPUB**

2003/0037033 A1, hereinafter Nyman) in view of **Kennedy (US PGPUB 2004/0057409 A1)** in view of **Liu (US Patent 6,980,537 B1)** and further in view of **Gubbi (US Patent 6,934,752 B1)**.

Consider **claim 84 and as applied to claim 79 (and similarly applied to claims 33 and 135)**. Benveniste, Nyman, Kennedy, Liu disclose the claimed invention but fail to explicitly teach wherein said communication station adds a preamble of a unique word to the beginning of a packet transmitted from said communication means and it also adds a mid-amble of a similar unique word to every constant payload length.

However, Gubbi teaches wherein said communication station adds a preamble of a unique word to the beginning of a packet transmitted from said communication means and it also adds a mid-amble of a similar unique word to every constant payload length (column 3 lines 50-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Gubbi into the invention of Benveniste, Nyman, Kennedy, and Liu in order to synchronize pseudo-random (PN) generators of the transmitter and the receiver (column 3 lines 50-60).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

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Hand-delivered responses should be brought to

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098. The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Christopher M Brandt/

Examiner, Art Unit 2617

December 5, 2009

/George Eng/
Supervisory Patent Examiner, Art Unit 2617